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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,015	03/22/1999	EDMUND A. HEBERT	174-745	7858

23517 7590 03/12/2003

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EXAMINER

LEE, EDMUND H

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/12/2003

34

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/274,015

Applicant(s)

HEBERT ET AL.

Examiner

EDMUND H LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2003 and 15 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 33.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 46-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin et al (USPN 5779562) in view of Brown et al (USPN 5006297). In regard to claim 46, Melvin et al teach the basic claimed process for forming a golf ball including forming a core comprised of a solid center made from a first rubber based material and a solid outer layer made from a second rubber based material having different physical properties from the first rubber based material (col 4, ln 55-col 5, ln 5; fig 1); forming an inner cover layer made from a material having a first shore D hardness from about 65 to about 74 shore D and having an outer diameter of at least 1.6 inches (col 12, lns 30-35; col 19, lns 1-5; fig 1); forming an outer cover layer made from a material having a second shore D hardness less than the first shore D (fig 1)--as a note, Melvin et al also teach forming the outer cover layer by any well-known molding methods (col 19, lns 45-50). However, Melvin et al does not teach casting the outer cover layer. Brown et al teach forming a golf ball cover layer by casting. Melvin et al and Brown et al are analogous with respect to forming golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cast the outer cover layer of Melvin et al as taught by Brown et al in order to form a high quality golf ball.

In regard to claims 47-55, Melvin et al teach forming an outer cover layer with hardness from about 30 to about 60 shore D (fig 1); forming an inner cover layer material having hardness from about 68 to about 72 shore D (col 22, lns 1-5); forming an outer cover layer having a hardness from about 40 to about 60 shore D (fig 1); forming an outer cover layer having hardness from about 50 to 60 shore D (fig 1); using a first crosslinking agent in an amount from about 30 to about 38 parts per hundred of rubber (col 7, lns 1-8); and using a second crosslinking agent in the center in the amount of about 19 to about 25 parts per hundred of rubber (col 8, lns 27-35). However, Melvin et al does not teach the claimed amount of balata in the core outer layer but Melvin et al does teach adding fill-reinforcement agents to the core material (col 7, lns 9-10). The use of balata in the core material is well-known in the golf ball molding art. The specific amount of filler is a well-known parameter in the molding art and routinely determined by experimentation. Further, the specific amount of balata is generally well-known in the golf ball molding for its enhancement in golf ball performance. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed amount of balata in the core material of Melvin et al in order to improve the performance of the golf ball of Melvin et al.

3. Claims 56-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin et al (USPN 5779562) in view of Brown et al (USPN 5006297). In regard to claim 56, Melvin et al teach the basic claimed process for forming a golf ball including forming a core comprised of a solid center made from a first rubber based material and a solid outer layer made from a second rubber based material having different physical

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properties from the first rubber based material (col 4, ln 55-col 5, ln 5; fig 1); forming an inner cover layer made from a material having a first shore D hardness and having an outer diameter of at least 1.58 inches (col 12, lns 30-35; col 19, lns 1-5; fig 1); forming an outer cover layer made from polyurethane having a second shore D hardness less than the first shore D (fig 1)--as a note, polyurethane is a well-known castable reactive liquid material as illustrated by Brown et al. . However, Melvin et al does not teach casting the outer cover layer. Brown et al teach forming a golf ball cover layer by casting. Melvin et al and Brown et al are analogous with respect to forming golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cast the outer cover layer of Melvin et al as taught by Brown et al in order to form a high quality golf ball.

In regard to claims 57-72, Melvin et al teach forming an outer cover layer with hardness from about 50 to about 60 shore D (fig 1); forming an inner cover layer material having hardness from about 68 to about 72 shore D (col 22, lns 1-5); forming the inner cover layers such that the outer diameter is about 1.6 inches to about 1.63 inches (col 19, lns 1-5); forming the inner cover layers such that the outer diameter is about 1.62 inches to about 1.63 inches (col 18, ln 64-col 19, ln 5); using a center having an outer diameter from about 1 inch to about 1.15 inches (col 9, lns 20-28); forming the core outer layer such that the outer diameter is about 1.55 inches to about 1.58 inches (col 10, lns 30-34; col 18, ln 64-col 19, ln 10); using a first crosslinking agent in an amount from about 30 to about 38 parts per hundred of rubber (col 7, lns 1-8); and using a second crosslinking agent in the center in the amount of about 19 to about 25

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parts per hundred of rubber (col 8, lns 27-35). However, Melvin et al does not teach the claimed flexural modulus of the inner cover layer; and the claimed amount of balata in the core outer layer but Melvin et al does teach adding fill-reinforcement agents to the core material (col 7, lns 9-10). In regard to the claimed flexural modulus of the inner cover layer, such is a mere obvious matter of choice dependent on the desired final product or material availability and of little patentable consequence to claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed flexural modulus is generally well-known in the golf ball molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an inner cover layer material having the claimed flexural modulus in the process of Melvin et al in order to enhance the performance of the golf ball of Melvin et al. In regard to the use of balata in the core material is well-known in the golf ball molding art. The specific amount of filler is a well-known parameter in the molding art and routinely determined by experimentation. Further, the specific amount of balata is generally well-known in the golf ball molding for its enhancement in golf ball performance. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed amount of balata in the core material of Melvin et al in order to improve the performance of the golf ball of Melvin et al.

4. Claims 73-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin et al (USPN 5779562) in view of Brown et al (USPN 5006297). In regard to claim 73, Melvin et al teach the basic claimed process for forming a golf ball including forming a core comprised of a solid center made from a first rubber based material and

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a solid outer layer made from a second rubber based material having different physical properties from the first rubber based material (col 4, ln 55-col 5, ln 5; fig 1); forming an inner cover layer made from a material having a first shore D hardness and having an outer diameter of at least 1.58 inches (col 12, lns 30-35; col 19, lns 1-5; fig 1); forming an outer cover layer having a thickness of about 0.05 inch or less made from polyurethane having a second shore D hardness less than the first shore D (col 15, lns 1-12; fig 1)—as a note, polyurethane is a well-known castable reactive liquid material as illustrated by Brown et al. However, Melvin et al does not teach casting the outer cover layer. Brown et al teach forming a golf ball cover layer by casting. Melvin et al and Brown et al are analogous with respect to forming golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cast the outer cover layer of Melvin et al as taught by Brown et al in order to form a high quality golf ball.

In regard to claims 74-76, Melvin et al teach forming an outer cover layer with hardness from about 50 to about 60 shore D (fig 1); forming an inner cover layer material having hardness from about 68 to about 72 shore D (col 22, lns 1-5); and forming the outer cover layer with a thickness of about 0.02 inc to 0.04 inch (col 15, lns 1-12; fig 1).

5. Applicant's arguments with respect to claims 46-76 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Renard et al (USPN 5989136) teach casting a layer onto a golf ball core. Cavallaro et al (USPN 5688191) teach using a castable liquid urethane to form a layer of a golf ball.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Edmund Lee whose telephone number is (703) 305-4019. The examiner can normally be reached on Monday-Wednesday and Friday from 8:00 AM to 4:00 PM. The fax number for Examiner Edmund Lee is (703) 872-9615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan H. Silbaugh, can be reached on (703) 308-3829.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

EHL

March 10, 2003



Edmund Lee

3/10/03

Patent Examiner, AU 1732